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09/396,054	09/15/1999	YOSHIHITO ISHIBASHI	09812.0583-00000	6914

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EXAMINER

ABEL JALIL, NEVEEN

ART UNIT	PAPER NUMBER
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2165

MAIL DATE	DELIVERY MODE
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05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/396,054

Applicant(s)

ISHIBASHI, YOSHIHITO

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 14-16, 18, 20-25, 29-34 and 38-41 is/are rejected.
- 7) ☒ Claim(s) 6-13, 17, 19, 26-28 and 35-37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. In response to Applicant's Amendment filed on March 14, 2007, claims 1-41 are still pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 14-16, 18, 20-25, 29-34, and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,784,464 to Akiyama et al. in view of U.S. Patent No. 5,319,705 to Halter et al.

Note: U.S. Patent No. 5,784,464 to Akiyama et al. was cited in the first office action.

As to claims 1, and 20, Akiyama et al. discloses an information retrieval system and key distribution system including encrypting a random number with a first key in response to content access request, and a second authenticator by generating a second key and encrypting the first key, generating yet a third key, decrypting the keys, and logging said information (see column 3, lines 1-23).

Though Akiyama et al. does disclose a method for authenticating a client with a key stored before hand in the client, Akiyama et al. also further suggests that any known way of

Art Unit: 2165

generating, storing, or transmitting a key may be used and also suggests that multiple keys can be generated (see column 4, lines 12-38).

The access system disclosed by Halter includes the sending of encrypted decryption keys being sent to a customer by the same means as the encrypted software being purchased, as well the sending to the customer a “customer key” for decrypting the encrypted file key. Halter also discloses the changing of the keys when a new group of files is acquired (see column 5, line 65 to column 6, line 24). Halter further suggests that this is done to prevent files from being decrypted except at appropriate user processors (see column 4, lines 48-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Akiyama et al. by using the key distribution system disclosed by Halter, in order to prevent files from being decrypted except at appropriate user processors.

As to claims 2, and 21, Akiyama et al. as modified discloses further comprising the storage key generating means for generating the second storage key by means of a random number generator (See Akiyama et al. column 11, lines 59-65, also see Halter et al. abstract).

As to claim 3, Akiyama et al. as modified discloses wherein the decrypted content key is encrypted with identification information of the user equipment and stored into the user equipment (See Akiyama et al. column 7, lines 1-8, also see Halter et al. abstract).

As to claim 4, Akiyama et al. as modified discloses wherein the content key is encrypted, in the user equipment, with the first storage key and identification information of the user equipment, and the content key stored in the user equipment is decrypted with the first storage key and the identification information of the user equipment (See Akiyama et al. column 4, lines 15-25, also see Halter et al. abstract).

As to claim 5, Akiyama et al. as modified discloses wherein the second storage key is generated by a decrypted key generating means provided in the user equipment (See Akiyama et al. column 4, lines 15-25, also see Halter et al. abstract).

As to claims 14, 29, and 38, Akiyama et al. as modified discloses wherein the user equipment has stored therein identification information of the user equipment (See Akiyama et al. Figure 9, 11, 12, databases, also see Akiyama et al. column 3, lines 1-5, and column 7, lines 1-8).

As to claims 15, and 30, Akiyama et al. as modified discloses wherein the data storage starts decrypting the content key stored in the second storing means depending on the result of inspection of the identification information of the data storage, stored in the second storing means (See Akiyama et al. Figure 10, S23, wherein “result of inspection” reads on “comparator”).

As to claim 16, Akiyama et al. as modified discloses as modified wherein the decrypted content key supplied from the user storing has added thereto information that the content key has been obtained by restoration (See Akiyama et al. column 7, lines 25-31).

As to claims 18, and 41, Akiyama et al. as modified discloses wherein the content key has added thereto frequency information which limits the number of times the content key can be used (See Akiyama et al. Figure 12, S34, counter value, also see Akiyama et al. column 10, lines 15-20).

As to claim 22, Akiyama et al. as modified discloses wherein the encrypting means encrypts the decrypted content key with identification information of a second storing means (See Akiyama et al. column 12, lines 10-18).

As to claim 23, Akiyama et al. as modified discloses wherein the content key is encrypted, in the first storing means, with the first storage key and identification information of the first storing means (See Akiyama et al. column 12, lines 10-18); and

the content key stored in the first storing means is decrypted with the first storage key and the identification information of the first storing means (See Akiyama et al. column 12, lines 10-18).

As to claims 24, and 31, Akiyama et al. as modified discloses wherein the first storing means, first decrypting means, and encrypting means form together a data storage, wherein the

Art Unit: 2165

key management unit manages the second storage key of the data storage (See Akiyama et al. column 7, lines 25-35).

As to claims 25, and 32, Akiyama et al. as modified discloses wherein the data storage is a data receiver which receives a content data encrypted and sent from a data transmitter (See Akiyama et al. column 5, lines 32-43).

As to claim 33, Akiyama et al. as modified discloses wherein the key management unit comprises an identification information storing means in which the identification information of the first storing means is stored (See Akiyama et al. column 7, lines 1-8).

As to claim 34, Akiyama et al. as modified discloses wherein the key management unit accounts the data service following the predetermined procedure depending upon a generation of the second storage key (See Akiyama et al. column 3, lines 1-5).

As to claim 39, Akiyama et al. as modified discloses wherein the data storage starts decrypting the content key stored in the second content storing means (See Akiyama et al. column 3, lines 17-19).

As to claim 40, Akiyama et al. as modified discloses wherein the content key obtained by decryption from the second storing means has added thereto information that the content key has

been obtained by restoration, as requirement information (See Akiyama et al. column 15, lines 1-21).

Allowable Subject Matter

4. Claims 6-13, 17, 19, 26-28 and 35-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed on March 14, 2007 have been fully considered but they are not persuasive.

First, the Examiner would like to respectfully note that the Applicant is responsible for the references in their entirety. The sections pointed to in the office action are merely for detail and emphasis. But they aren't meant to be the only citations in the prior art where the claimed subject matter interpretation can be found.

In response to Applicant's argument that "Akiyama et al. and Halter et al. fail to teach or suggest sending the encrypted content key and the second storage key to key management unit" is acknowledged but not deemed to be persuasive.

The combination of Akiyama et al. and Halter et al. indeed teaches the argued limitation since Halter et al. teaches encrypting the content key while Akiyama et al. teaches encrypting

Art Unit: 2165

content and sending the second storage key to a key management unit in column 14, lines 35-60, wherein the process is described in details. Perhaps wording is not exactly identical between the claim language and cited reference but the process and functionality is clearly taught. However, the OA acknowledges that Akiyama et al. alone does not teach, “encrypting the content key” instead it only teaches “encrypting the content with a key and sending a second storage key belonging to the client to a key management unit. Therefore, Halter et al. was introduced to teach the deficiency (See column 6, line 9, also see Figure 1, basically the encrypted content key can only be decrypted after the receipt of customer key associated with storage device and a separate decryption key for the encrypted content key). Thus, the combination teaches the argued limitation.

In response to Applicant’s argument that “The Examiner fails to point out where either Akiyama et al. or Halter et al. allegedly teaches any of “content key”, “first storage key”, “content data”, and “second storage key” recited in claims 1 and 20” is acknowledged but not deemed to be persuasive.

Not only was Akiyama et al. thoroughly covered in previous round of prosecution but it was modified to teach the explicitly argued missing limitation of “encrypting the content key” and nothing more. Nevertheless:

The teaching of “content key” can be found in Akiyama et al. (content encrypted with a title key, see column 18, lines 2-4, and column 7, lines 25-31, wherein encrypted content is disclosed) and Halter et al. column 4, lines 1-2, file key).

The teaching of “first storage key” can be found in Akiyama et al. (See column 3, lines 24-30) and Halter et al. (See Figure 14, shows first customer key, and second customer key, also see column 21, lines 33-35)

The teaching of “content data” can be found in Akiyama et al. (See column 7, line 9) and Halter et al. (See Figure 1, multimedia files).

The teaching of “second storage key” can be found in Akiyama et al. (See column 3, lines 24-30) and Halter et al. (See Figure 14, shows first customer key, and second customer key, once a file key is encrypted, then a separate key is required on the receiving end to for the user device, and yet another key to decrypt the content at the user device).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, The motivation to combined two analogous art cited references come from within what's well known to a person of ordinary skill in the art as explained in the OA to provides an additional layer of security. The Examiner proposes the two cited references are combined since one teaches and extra layer of encryption at the content key level Halter et al.

while maintaining the usage of distribution security keys across content providers and clients just as it is taught in Akiyama et al.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5: 30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2165

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Neveen Abel-Jalil
May 25, 2007